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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,314

10/24/2003

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EXAMINER

BIBBINS, LATANYA

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/693,314	Applicant(s) HORAI ET AL.	
	Examiner LaTanya Bibbins	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The declaration filed on February 22, 2008 under 37 CFR 1.131 is sufficient to overcome the Shirota reference.

Response to Arguments

2. Applicant's arguments with respect to claims 1-9 and 11 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 7-8 are drawn to a recording apparatus and fail to recite any structure to perform the recording. As such, the claim is effectively a single means claim and is rejected as having undue breadth. See MPEP **2164.08(a)**. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ

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195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to *Hyatt* is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. *Claims 3-4 and 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

Claims 3 and 4 recites the limitation "the linear recording velocity." There is insufficient antecedent basis for this limitation in the claims.

Claims 7 and 8 are drawn to a data recording apparatus but fail to recite structural features of the recording apparatus. The recited limitations do not result in any change in the physical structure of the recording apparatus but rather recite the intended use of the recording apparatus. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)). See also MPEP 2114.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. ***Claims 1, 2, 5-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohno et al. (US Patent Number 5,109,373).***

Regarding claim 1, Ohno discloses a data recording method of modulating the power of a laser beam in accordance with a pulse pattern, projecting the laser beam onto a write-once type optical recording medium to form a record mark and recording data in the write-once type optical recording medium, wherein the pulse pattern is constituted by a pattern in which the power of the laser beam is set to a recording power P_w within a first period and a second period and the power of the laser beam is set to an intermediate power P_m lower than the recording power P_w within a third period provided between the first period and the second period, the length of the first period and the levels of the recording power P_w and the intermediate power P_m being set to satisfy $1.7T \leq t_{top} \leq 2T$ and $1.4 \leq P_w/P_m$ where T is a length corresponding to one cycle of a reference pulse and t_{top} is the length of the first period (see Figure 2(b) and the discussion in column 5 lines 36-39 regarding the length of the first pulse; see Figure 11, the discussion in column 10 lines 1 and 2 and the data in Table 1 regarding the bias power P_b and the recording peak power P_p).

Regarding claim 2, Ohno discloses wherein the length of the first period is set to satisfy $1.7T \leq t_{top} \leq 2.0T$ and the recording power P_w and the intermediate power P_m are set to satisfy

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$1.4 \leq P_w/P_m \leq 1.62$ (see Figure 2(b) and the discussion in column 5 lines 36-39 regarding the length of the first pulse; see Figure 11, the discussion in column 10 lines 1 and 2 and the data in Table 1 regarding the bias power P_b and the recording peak power P_p).

Regarding claims 5 and 6, Ohno discloses wherein record marks including 5T marks are formed in the write-once type optical recording medium during recording of data therein (see Figures 2(a) and 2(b)).

Claims 7 and 8 are drawn to the apparatus corresponding to the method of using same as claimed in claims 1 and 2 respectively. Therefore apparatus claims 7 and 8 correspond to method claims 1 and 2, and are rejected for the same reasons of anticipation as used above.

Claim 9 is drawn to the write-once type optical recording medium corresponding to the method of using same as claimed in claim 1. Therefore write-once type optical recording medium claim 9 corresponds to method claim 1, and is rejected for the same reasons of anticipation as used above.

Regarding claim 11, Ohno discloses a light transmittable substrate, a dummy substrate and a recording layer provided between the light transmittable substrate and the dummy substrate and containing an organic dye (see Figure 22 and the discussion in column 16 lines 40-55).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al. (US Patent Number 5,109,373) in view of Yokoi (US PGPub Number 2003/0090981 A1).

Regarding claims 3 and 4, Ohno discloses a data recording method in according with claims 1 and 2 as noted in the 35 U.S.C. 102(b) rejection above.

Ohno, however, fails to disclose, while Yokoi discloses wherein the linear recording velocity is set equal to or higher than 14 m/sec during recording of data in the write-once type optical recording medium (see Figures 34 and 35 and the discussion in paragraphs [0262]-[0271]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Yokoi into that of Ohno. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to achieve a uniformly jitter-reduced recording across the entire recording surface of the optical disk (as suggested by Ohno in paragraph [0271]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627